# STATE OF UTAH DIVISION OF WATER QUALITY DEPARTMENT OF ENVIRONMENTAL QUALITY SALT LAKE CITY, UTAH

### UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES) PERMITS

### Major Industrial Permit No. UT0000094

In compliance with provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 1953, as amended (the "Act"),

### **PACIFICORP-CARBON PLANT**

is hereby authorized to discharge from its facility to receiving waters named

## Willow Creek, and the Price River,

in accordance with specific discharge points, effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit shall become effective on January 1, 2015.

This permit expires at midnight on December 31, 2019.

Signed this 30 day of December, 2014.

Walter L. Baker, P.E.

Director

Utah Division of Water Quality

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# I. <u>DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS</u>

A. Description of Discharge Points. The authorization to discharge provided under this part is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a UPDES permit are violations of the *Act* and may be subject to penalties under the *Act*. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge may be subject to criminal penalties as provided under the *Act*.

Outfall Numbers	Location of Discharge Outfalls
001	This is the discharge from the sand filter building to Willow
	Creek at latitude 39° 43 ' 40 " and longitude 110° 51' 52",
003	This is the discharge from the settling ponds to the Price River at latitude 39° 43' 29" and longitude 110° 51' 50".

B. Narrative Standard. It shall be unlawful, and a violation of this permit, for the permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum, or other nuisances such as color, odor or taste, or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by a bioassay or other tests performed in accordance with standard procedures.

# C. Specific Limitations and Self-Monitoring Requirements.

- 1. Effective immediately, and lasting through the life of this permit, there shall be no chronic toxicity in Outfalls 001 and 003 as defined in *Part I.C.Error! Reference source not found.* and Part VI. and determined by test procedures described in *Part I.C.Error! Reference source not found.* of this permit. The sample shall be collected at Outfall 003.
- 2. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfalls 001 and 003. Such discharges shall be limited and monitored by the permittee as specified below:

Pacificorp—Carbon, Discharge 001, Effluent Limitations <sup>1</sup>				
Parameter	Maximum Monthly Avg	Maximum Weekly Avg	Daily Minimum	Daily Maximum
Flow, mgd	NA	NA	NA	1.0
Temperature, Winter <sup>2</sup> , °C	NA	NA	NA	10.1
Temperature, Spring <sup>2</sup> , °C	NA	NA	NA	20.0
Temperature, Summer <sup>2</sup> , °C	NA	NA	NA	20.0
Temperature, Fall <sup>2</sup> , °C	NA	NA	NA	11.9
TRC, mg/L	NA	NA	NA	0.011
pH, Standard Units	NA	NA	6.5	9.0
D.O. mg/L	NA	NA	5.0	NA
Oil & Grease <sup>3</sup> , mg/L	NA	NA	NA	10.0
TSS <sup>4</sup> , mg/L	25	35	NA	50.0
TDS, mg/L	NA	NA	NA	1,200

Pacificorp-Carbon, Discharge 001, Self-Monitoring and Reporting Requirements <sup>5</sup>				
Parameter	Frequency	Sample Type	Units	
Total Flow	Continuous	Recorder	MGD	
Temperature	Weekly	Grab	Degrees C	
TRC	Weekly	Grab	mg/L	
pH	Weekly	Grab	SU	
D.O.	Weekly	Grab	mg/L	
Oil & Grease/Visual Sheen (Sample if sheen is present)	Monthly	Grab	mg/L	
TSS	Monthly	Grab	mg/L	
TDS, Influent	Monthly	Grab	mg/L	
TDS, Effluent	Monthly	Grab	mg/L	

Pacificorp-Carbon, Discharge 003, Effluent Limitations <sup>1</sup>				
Parameter	Maximum Monthly Avg	Maximum Weekly Avg	Daily Minimum	Daily Maximum
Flow, mgd	NA	NA	NA	1.0
Temperature, Winter <sup>2</sup> , °C	NA	NA	NA	10.1

<sup>1</sup> See Definitions, Part VI for definition of terms.

<sup>2</sup> For compliance with this permit the seasonal limits will be defined as: Winter (January 1 – March 31), Spring (April 1-June 30), Summer (July 1 – September 30), and Fall (October 1 – December 31)

<sup>3</sup> The analytical sample for oil & grease is only required when a sheen is observed or there is another reason to believe oil & grease may be present.

<sup>4</sup> The permittee must meet the TSS maximum limit of 50 mg/L except where a rainfall event causes the overflow of facilities designed, constructed, and operated to contain the runoff from a ten year, 24-hour rainfall event. The permittee must maintain a precipitation gage at the plant that will be used for determining the amount of precipitation unless the Director approves of the use of a precipitation gage at another weather station.

<sup>5</sup> Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: at the Outfalls 001 and/or 003 prior to mixing with the receiving stream.

NA	NA	NA	43.2
NA	NA	NA	28.5
NA	NA	NA	11.9
NA	NA	NA	0.05
NA	NA	NA	0.19
NA	NA	NA	0.08
NA	NA	NA	0.05
NA	NA	6.5	9.0
NA	NA	5.0	NA
NA	NA	NA	10.0
25	35	NA	50.0
NA	NA	NA	3,200
NA	NA	NA	Pass, IC <sub>25</sub> > 26% effluent
	NA N	NA         NA           NA         NA	NA         NA         NA           NA         NA         S.0           NA         NA         NA           NA         NA         NA           NA         NA         NA           NA         NA         NA           NA         NA         NA

Pacificorp-Carbon, Discharge 003, Self-Monitoring and Reporting Requirements <sup>5</sup>				
Parameter	Frequency	Sample Type	Units	
Total Flow	Continuous	Recorder	MGD	
Temperature	Weekly	Grab	Degrees C	
TRC	Weekly	Grab	mg/L	
pH	Weekly	Grab	SU	
D.O.	Weekly	Grab	mg/L	
Oil & Grease/Visual Sheen (Sample if sheen is present)	Monthly	Grab	mg/L	
TSS	Monthly	Grab	mg/L	
TDS, Influent	Monthly	Grab	mg/L	
TDS, Effluent	Monthly	Grab	mg/L	
Whole Effluent Toxicity, Chronic	Quarterly	Composite	Pass/Fail	

Pacificorp-Carbon, Sum of Discharges 001 & 003, Effluent Limitations <sup>1</sup>				
Parameter	Maximum Monthly Avg	Maximum Weekly Avg	Daily Minimum	Daily Maximum
TDS (net contribution loading <sup>6</sup> ) tons/day	NA	NA	NA	1.0

NA - Not Applicable

- 3. There shall be no visible sheen or floating solids or visible foam in other than trace amounts
- 4. There shall be no discharge of sanitary wastes.
- 5. There shall be no discharge of polychorinated biphenyl compounds.

<sup>6</sup> The TDS limitation of 1.0 ton per day is the net limit of both outfalls. Use the difference of monthly TDS influent concentration data and monthly (same day sampled) TDS effluent concentration data in calculation of TDS loading

- 6. There shall be no discharge of coal pile runoff except through the discharge points 001 or 003.
- 7. There shall be no discharge of detectable amounts of the 126 priority pollutants in the cooling tower blowdown due to chemicals added for cooling tower maintenance. Compliance with this requirement may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the cooling tower blowdowns by the analytical methods in 40 CFR Part 136. These calculations must be based on the cooling tower blowdowns only and shall not include dilution by any other effluent streams. A list of the certified analytical contents of all biofouling and maintenance formulations (Manufacturer's certification as to contents and priority pollutants status) shall be submitted along with the engineering calculations. The engineering calculations shall be updated annually or whenever there is a change in the chemicals used or an increase in the application rate of the chemicals. If chemical usage, both type and quantity has not changed during the year, a letter certifying to that fact is adequate to demonstrate continued compliance with the requirement.

If the permittee decides not to submit engineering calculations, the permittee shall monitor the cooling tower blowdowns at least annually for the 126 priority pollutants. Total aluminum, total chromium, and total zinc in the discharges shall also be sampled at least yearly. The analytical results are to be submitted by November 1 each year.

- 8. There shall be no discharge of chemical metal cleaning wastes as defined in 40 CFR 423.
- 9. There shall be no chemicals added to the intake settling pond prior to the overflow returning to the original water course.

# 10. Chronic Whole Effluent Toxicity (WET) Testing

a. Whole Effluent Toxicity - Chronic Testing - Starting on the effective date, the permittee shall quarterly, conduct chronic short-term toxicity tests on a composite sample of the final effluent. The sample shall be collected at Outfall 003.

The monitoring frequency shall be quarterly. Samples shall be collected on a two-day progression; i.e., if the first sample is on a Monday, during the next sampling period, sampling shall be on a Wednesday. If chronic toxicity is detected, the test shall be repeated in less than four weeks from the date the initial sample was taken. The need for any additional samples, and/or a Toxicity Reduction Evaluation (TRE), see *Part I.C.Error! Reference source not found.* b. shall be determined by the Director. If the second test shows no chronic toxicity, routine monitoring shall be resumed.

The chronic toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, 4<sup>th</sup> Edition, (EPA 821/R-02-13), October 2002 as per 40 CFR 136.3(a) TABLE 1A-LIST OF APPROVED BIOLOGICAL METHODS, and the Region VIII EPA NPDES Chronic Test Conditions - Static Renewal Whole Effluent Toxicity Test (August, 1997). Test species shall consist of Ceriodaphnia dubia and Pimephales promelas (fathead minnow). A CO<sub>2</sub>

atmosphere may be used (in conjunction with an unmodified test) in order to account for artificial pH drift.

Chronic toxicity occurs when the  $IC_{25}$  is less than or equal to an effluent concentration of 26%. If any of the acceptable control criteria are not met, the test shall be considered invalid.

Quarterly test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting calendar quarter (e.g., biomonitoring results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, with the remaining biomonitoring reports submitted with DMRs due each July 28, October 28, and January 28). All test results shall be reported along with the DMR submitted for that reporting period. The format for the report shall be consistent with the latest revision of the *Region VIII Guidance for Chronic Whole Effluent Reporting (August, 1997)* and shall include all the physical testing as specified.

If the results for a minimum of ten consecutive tests indicate no chronic toxicity, the permittee may request a reduction in testing frequency and/or reduction to one species. The Director may approve, partially approve, or deny the request based on results and other available information. If approval is given, the modification will take place without a public notice.

The current Utah whole effluent toxicity (WET) policy is in the process of being updated and revised to assure its consistency with the Environmental Protection Agency's national and regional WET policy. When said revised WET policy has been finalized and officially adopted, this permit will be reopened and modified to incorporate satisfactory follow-up chronic toxicity language (chronic pattern of toxicity, PTI and/or TIE/TRE, etc.) without a public notice, as warranted and appropriate.

b. *Toxicity Reduction Evaluation (TRE)*. If toxicity is detected during the life of this permit and it is determined by the Director that a TRE is necessary, the permittee shall be so notified and shall initiate a TRE immediately thereafter. The purpose of the TRE will be to establish the cause of toxicity, locate the source(s) of the toxicity, and control or provide treatment for the toxicity.

A TRE may include but is not limited to one, all, or a combination of the following:

- (a) Phase I Toxicity Characterization
- (b) Phase II Toxicity Identification Procedures
- (c) Phase III Toxicity Control Procedures
- (d) Any other appropriate procedures for toxicity source elimination and control.

If the TRE establishes that the toxicity cannot be immediately eliminated, the permittee shall submit a proposed compliance plan to the Director. The plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control. If the approach and schedule are acceptable to the Director, this permit may be reopened and modified.

If the TRE shows that the toxicity is caused by a toxicant(s) that may be controlled with specific numerical limitations, the permittee may:

- (e) Submit an alternative control program for compliance with the numerical requirements.
- (f) If necessary, provide a modified biomonitoring protocol, which compensates for the pollutant(s) being controlled numerically.

If acceptable to the Director, this permit may be reopened and modified to incorporate any additional numerical limitations, a modified compliance schedule if judged necessary by the Director, and/or a modified biomonitoring protocol.

Failure to conduct an adequate TRE, or failure to submit a plan or program as described above, or the submittal of a plan or program judged inadequate by the Director, shall be considered a violation of this permit.

# II. STORM WATER REQUIREMENTS.

- A. <u>Coverage of This Section</u>. The requirements listed under this section shall apply to storm water discharges.
  - 1. Site Coverage. This section covers discharges of storm water associated with industrial activity to waters of the State from the confines of the facility listed on the cover page. Specific monitoring requirements have been included and are based on the requirements of the UPDES Multi Sector General Permit for Storm Water Discharges Associated with Industrial Activity, Permit No. UTR000000, Sector O., Storm Water Discharges Associated With Industrial Activity From Steam Electric Power Generating Facilities, Including Coal Handling Areas.
- B. Prohibition of Non-Storm Water Discharges. Except for discharges identified in *Part I.*, and discharges described below in this paragraph, non-storm water discharges are prohibited. The following non-storm water discharges may be authorized under this permit provided the non-storm water component of the discharge is in compliance with this section; discharges from fire fighting activities; fire hydrant flushing; potable water sources including waterline flushing; drinking fountain water; irrigation drainage and lawn watering; routine external building wash down water where detergents or other compounds have not been used in the process; pavement wash waters where spills or leaks of toxic or hazardous materials (including oils and fuels) have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated compressor condensate; uncontaminated springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.
- C. <u>Storm Water Pollution Prevention Plan Requirements</u>. The permittee must have (on site) or develop and implement a storm water pollution prevention plan as a condition of this permit.
  - 1. <u>Contents of the Plan</u>. The plan shall include, at a minimum, the following items:
    - a. Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team who are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

- b. Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials, which may be reasonably expected to have the potential as a significant pollutant source. Each plan shall include, at a minimum:
  - (1) Drainage. A site map indicating drainage areas and storm water outfalls. For each area of the facility that generates storm water discharges associated with the waste water treatment related activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow and an identification of the types of pollutants that are likely to be present in storm water discharges associated with the activity. Factors to consider include the toxicity of the pollutant; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified. The site map shall include but not be limited to:
    - (a) Drainage direction and discharge points from all wastewater associated activities including but not limited to transport, chemical/material loading, unloading and storage areas, vehicle maintenance areas, salt or sand storage areas.
    - (b) Location of any erosion and sediment control structure or other control measures utilized for reducing pollutants in storm water runoff.
    - (c) Location of any handling, loading, unloading or storage of chemicals or potential pollutants such as caustics, hydraulic fluids, lubricants, solvents or other petroleum products, or hazardous wastes and where these may be exposed to precipitation.
    - (d) Locations where any major spills or leaks of toxic or hazardous materials have occurred.
    - (e) Location of any sand or salt piles.

- (f) Location of fueling stations or vehicle and equipment maintenance and cleaning areas that are exposed to precipitation.
- (g) Location of receiving streams or other surface water bodies.
- (h) Locations of outfalls and the types of discharges contained in the drainage areas of the outfalls.
- (2) Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the effective date of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the effective date of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.
- (3) Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.
- (4) Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.
- (5) Summary of Potential Pollutant Sources and Risk Assessment. A narrative description of the potential pollutant sources from the following activities associated with treatment works: access roads/rail lines; loading and unloading operations; outdoor storage activities; material handling sites; outdoor vehicle storage or maintenance sites; significant dust or particulate generating processes; and onsite waste disposal practices. Specific potential pollutants shall be identified where known.
- (6) *Measures and Controls*. The permittee shall develop a description of storm water management controls appropriate for

the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls.

- (7) Good Housekeeping. All areas that may contribute pollutants to storm waters discharges shall be maintained in a clean, orderly manner. These are practices that would minimize the generation of pollutants at the source or before it would be necessary to employ sediment ponds or other control measures at the discharge outlets. Where applicable, such measures or other equivalent measures would include the following: sweepers and covered storage to minimize dust generation and storm runoff; conservation of vegetation where possible to minimize erosion; sweeping of haul roads, and exits to reduce or eliminate off site tracking; sweeping of sand or salt storage areas to minimize entrainment in storm water runoff; collection, removal, and proper disposal of waste oils and other fluids resulting from vehicle and equipment maintenance; other equivalent measures to address identified potential sources of pollution.
- (8) Preventive Maintenance. A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.
- (9) Spill Prevention and Response Procedures. Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points, shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures and equipment for cleaning up spills shall be identified in the plan and made available to the appropriate personnel.
- (10) *Inspections*. In addition to the comprehensive site evaluation required under paragraph (*Part II.C.1.b(16)*) of this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on a periodic basis.

The following areas shall be included in all inspections: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; and vents and stacks from industrial activities. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained. The use of a checklist developed by the facility is encouraged.

- (11) *Employee Training*. Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify how often training will take place, but training should be held at least annually (once per calendar year). Employee training must, at a minimum, address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and control; fueling procedures; general good housekeeping practices; proper procedures for using fertilizers, herbicides and pesticides.
- (12) Record keeping and Internal Reporting Procedures. A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.
- (13) Non-storm Water Discharges.
  - (a) Certification. The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test.

    Certifications shall be signed in accordance with Part V.G of this permit.

- (b) Exceptions. Except for flows from fire fighting activities, sources of non-storm water listed in Part II.B. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
- (c) Failure to Certify. Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director within 180 days after the effective date of this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the State, which are not, authorized by a UPDES permit are unlawful, and must be terminated.
- (14) Sediment and Erosion Control. The plan shall identify areas, which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.
- (15) Management of Runoff. The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity Part II.C.1.b (Description of Potential Pollutant Sources) of this permit] shall be considered when determining reasonable and appropriate measures. Appropriate measures or other equivalent measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, wet

- detention/retention devices and discharging storm water through the waste water facility for treatment.
- (16) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:
  - (a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
  - (b) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with *Part II.C.1.b* (Description of Potential Pollutant Sources) of this section and pollution prevention measures and controls identified in the plan in accordance with *Part II.C.1.b(6)* (Measures and Controls) of this section shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.
  - (c) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph *i*. (above) shall be made and retained as part of the storm water pollution prevention plan for at least 3 years after the date of the evaluation. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with *Part V.G* (Signatory Requirements) of this permit.

- (17) Deadlines for Plan Preparation and Compliance. The permittee shall prepare and implement a plan in compliance with the provisions of this section within 270 days of the effective date of this permit. If the permittee already has a plan, it shall be revised according to Part II.C.1.b(16), Comprehensive Site Evaluation.
- (18) Keeping Plans Current. The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the state or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified by the plan, or in otherwise achieving the general objective of controlling pollutants in storm water discharges associated with the activities at the facility.

# D. Monitoring and Reporting Requirements.

- 1. Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The examination must be made at least once in each of the following designated periods during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event: January through March; April through June; July through September; and October through December.
  - a. Sample and Data Collection. Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.
  - b. Visual Storm Water Discharge Examination Reports. Visual examination reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or

snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

- c. Representative Discharge. Based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.
- d. Adverse Conditions. When a discharger is unable to collect samples over the course of the visual examination period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination and retain this documentation onsite with the results of the visual examination. Adverse weather conditions, which may prohibit the collection of samples, include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).
- e. *Inactive and Unstaffed Site*. When a discharger is unable to conduct visual storm water examinations at an inactive and unstaffed site, the operator of the facility may exercise a waiver of the monitoring requirement as long as the facility remains inactive and unstaffed. The facility must maintain a certification with the pollution prevention plan stating that the site is inactive and unstaffed so that performing visual examinations during a qualifying event is not feasible.
- f. Analytical Monitoring Requirements. During the second and fourth year of the permit the facility must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs of this section titled (Sampling Waiver), (Representative Discharge), and (Alternative Certification). The facility is required to monitor their storm water

discharges for the pollutants of concern listed in the table below. Facilities must report in accordance with the (Reporting) section. In addition to the parameters listed in the table, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

- g. *Monitoring Periods*. The facility shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph above.
- h. Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.
  - (1) Adverse Conditions. When a discharger is unable to collect samples within a specified sampling period due to adverse climatic conditions, the discharger shall collect a substitute sample from a separate qualifying event in the next period and submit the data along with data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

- (2) Low Concentration Waiver. When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the second year monitoring period is less than the corresponding value for that pollutant listed in Table U-1 under the column Monitoring Cut-Off Concentration, a facility may waive monitoring and reporting requirements in the fourth year monitoring period. The facility must submit to the *Director*, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.
- (3) <u>Inactive and Unstaffed Site</u>. When a discharger is unable to conduct quarterly chemical storm water sampling at an inactive and unstaffed site, the operator of the facility may exercise a waiver of the monitoring requirements as long as the facility remains inactive and unstaffed. The facility must submit to the *Director*, in lieu of monitoring data, a certification statement on the *SWDMR* stating that the site is inactive and unstaffed so that collecting a sample during a qualifying event is not possible.

# III. MONITORING, RECORDING & GENERAL REPORTING REQUIREMENTS

- A. <u>Representative Sampling.</u> Samples taken in compliance with the monitoring requirements established under *Part I* shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. Sludge samples shall be collected at a location representative of the quality of sludge immediately prior to the use-disposal practice.
- B. <u>Monitoring Procedures.</u> Monitoring must be conducted according to test procedures approved under *Utah Administrative Code ("UAC") R317-2-10*, unless other test procedures have been specified in this permit.
- C. <u>Penalties for Tampering.</u> The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. Reporting of Monitoring Results. Monitoring results obtained during the previous month shall be summarized for each month and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) or NetDMR, postmarked no later than the 28th day of the month following the completed reporting period. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports including whole effluent toxicity (WET) test reports required herein, shall be signed and certified in accordance with the requirements of Signatory Requirements (Part V.G), and submitted by NetDMR or hard copy to the Director, Division of Water Quality and to EPA at the following addresses:

Department of Environmental Quality Division of Water Quality 195 North 1950 West PO Box 144870 Salt Lake City, Utah 84114-4870

- E. <u>Compliance Schedules.</u> Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.
- F. Additional Monitoring by the Permittee. If the permittee monitors any parameter more frequently than required by this permit, using test procedures approved under *UAC R317-2-10* or as specified in this permit, the results of

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this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated. Only those parameters required by the permit need to be reported.

# G. Records Contents. Records of monitoring information shall include:

- 1. The date, exact place, and time of sampling or measurements:
- 2. The individual(s) who performed the sampling or measurements;
- 3. The date(s) and time(s) analyses were performed;
- 4. The individual(s) who performed the analyses;
- 5. The analytical techniques or methods used; and,
- 6. The results of such analyses.
- H. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. A copy of this UPDES permit must be maintained on site during the duration of activity at the permitted location

# I. Twenty-four Hour Notice of Noncompliance Reporting.

- 1. The permittee shall (orally) report any noncompliance which may seriously endanger health or environment, as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality, (801) 231-1769, or 24-hour answering service (801) 536-4123.
- 2. The following occurrences of noncompliance shall be reported by telephone (801) 536-4300 as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances:
  - a. Any noncompliance which may endanger health or the environment;
  - b. Any unanticipated bypass, which exceeds any effluent limitation in the permit (See *Part IV.G., Bypass of Treatment Facilities.*);
  - c. Any upset which exceeds any effluent limitation in the permit (See *PartIV.H*, *Upset Conditions.*); or,
  - d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit.

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- 3. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times;
  - c. The estimated time noncompliance is expected to continue if it has not been corrected;
  - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and,
  - e. Steps taken, if any, to mitigate the adverse impacts on the environment and human health during the noncompliance period.
- 4. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Division of Water Quality, (801) 536-4300.
- 5. Reports shall be submitted to the addresses in *Part III.D*, *Reporting of Monitoring Results*.
- J. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for *Part III.D* are submitted. The reports shall contain the information listed in *Part III.I.3*.
- K. <u>Inspection and Entry</u> The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
  - 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
  - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit;

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4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location.

#### IV. COMPLIANCE RESPONSIBILITIES

- A. <u>Duty to Comply</u>. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.
- B. Penalties for Violations of Permit Conditions. The Act provides that any person who violates a permit condition implementing provisions of the Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions of the Act is subject to a fine not exceeding \$25,000 per day of violation; Any person convicted under UCA 19-5-115(2) a second time shall be punished by a fine not exceeding \$50,000 per day. Except as provided at Part IV.G, Bypass of Treatment Facilities and Part IV.H, Upset Conditions, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- C. <u>Need to Halt or Reduce Activity not a Defense</u>. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. <u>Duty to Mitigate</u>. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment.
- E. <u>Proper Operation and Maintenance</u>. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. <u>Removed Substances</u>. Collected screening, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not directly enter either the final effluent or waters of the state by any other direct route.

# G. Bypass of Treatment Facilities.

1. <u>Bypass Not Exceeding Limitations</u>. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for

essential maintenance to assure efficient operation. These bypasses are not subject to 2. and 3. of this section.

# 2. Prohibition of Bypass.

- a. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
  - (1) Bypass was unavoidable to prevent loss of human life, personal injury, or severe property damage;
  - (2) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance, and
  - (3) The permittee submitted notices as required under section IV.G.3.
- b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in *sections IV.G.2.a.(1), (2) and (3)*.

#### 3. Notice.

- a. *Anticipated bypass*. Except as provided above in *section IV.G.2* and below in *section IV.G.3.b*, if the permittee knows in advance of the need for a bypass, it shall submit prior notice, at least ninety days before the date of bypass. The prior notice shall include the following unless otherwise waived by the Director:
  - (1) Evaluation of alternative to bypass, including cost-benefit analysis containing an assessment of anticipated resource damages:
  - (2) A specific bypass plan describing the work to be performed including scheduled dates and times. The permittee must notify the Director in advance of any changes to the bypass schedule;
  - (3) Description of specific measures to be taken to minimize environmental and public health impacts;
  - (4) A notification plan sufficient to alert all downstream users, the public and others reasonably expected to be impacted by the bypass;

- (5) A water quality assessment plan to include sufficient monitoring of the receiving water before, during and following the bypass to enable evaluation of public health risks and environmental impacts; and,
- (6) Any additional information requested by the Director.
- b. *Emergency Bypass*. Where ninety days advance notice is not possible, the permittee must notify the Director, and the Director of the Department of Natural Resources, as soon as it becomes aware of the need to bypass and provide to the Director the information in *section IV.G.3.a(1) through (6)* to the extent practicable.
- c. *Unanticipated bypass*. The permittee shall submit notice of an unanticipated bypass to the Director as required under *Part III.I*, Twenty Four Hour Reporting. The permittee shall also immediately notify the Director of the Department of Natural Resources, the public and downstream users and shall implement measures to minimize impacts to public health and environment to the extent practicable.

### H. Upset Conditions.

- 1. <u>Effect of an upset</u>. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph 2 of this section are met. Director's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.
- 2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required under *Part III.I*, *Twenty-four Hour Notice of Noncompliance Reporting*; and,
  - d. The permittee complied with any remedial measures required under *Part IV.D*, *Duty to Mitigate*.
- 3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- I. <u>Toxic Pollutants</u>. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of *The Water Quality Act of 1987* for toxic pollutants within the time provided in the regulations that establish those standards or

prohibitions, even if the permit has not yet been modified to incorporate the requirement

- J. <u>Changes in Discharge of Toxic Substances</u>. Notification shall be provided to the Director as soon as the permittee knows of, or has reason to believe:
  - 1. That any <u>activity</u> has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - a. One hundred micrograms per liter (100 ug/L);
    - b. Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
    - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(7)* or (10); or,
    - d. The level established by the Director in accordance with UAC R317-8-4.2(6).
  - 2. That any activity has <u>occurred</u> or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - a. Five hundred micrograms per liter (500 ug/L);
    - b. One milligram per liter (1 mg/L) for antimony:
    - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(9)*; or,
    - d. The level established by the Director in accordance with *UAC R317-8-4.2(6)*.
- K. <u>Industrial Pretreatment</u>. Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of *The Water Quality Act of 1987*, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at 40 CFR 403, the State Pretreatment Requirements at *UAC R317-8-8*, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters.

In addition, in accordance with  $40 \ CFR \ 403.12(p)(1)$ , the permittee must notify the POTW, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if they discharge any substance into a POTW which if otherwise disposed of would be considered a hazardous waste under  $40 \ CFR \ 261$ .

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This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch)

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#### V. GENERAL REQUIREMENTS

- A. <u>Planned Changes</u>. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of parameters discharged or pollutant sold or given away. This notification applies to pollutants, which are not subject to effluent limitations in the permit. In addition, if there are any planned substantial changes to the permittee's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, the permittee shall give notice to the Director of any planned changes at least 30 days prior to their implementation.
- B. <u>Anticipated Noncompliance</u>. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.
- C. <u>Permit Actions</u>. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. <u>Duty to Reapply</u>. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.
- E. <u>Duty to Provide Information</u>. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- F. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.
- G. <u>Signatory Requirements</u>. All applications, reports or information submitted to the Director shall be signed and certified.
  - 1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
  - 2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described above and submitted to the Director, and,
- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
- 3. <u>Changes to authorization</u>. If an authorization under *paragraph V.G.2* is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of *paragraph V.G.2* must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
- 4. <u>Certification</u>. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- H. Penalties for Falsification of Reports. The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.
- I. <u>Availability of Reports</u>. Except for data determined to be confidential under *UAC* R317-8-3.2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of Director. As required by the *Act*, permit applications, permits and effluent data shall not be considered confidential.
- J. <u>Oil and Hazardous Substance Liability</u>. Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any

- responsibilities, liabilities, or penalties to which the permittee is or may be subject under the *Act*.
- K. <u>Property Rights</u>. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. <u>Severability</u>. The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- M. <u>Transfers</u>. This permit may be automatically transferred to a new permittee if:
  - 1. The current permittee notifies the Director at least 20 days in advance of the proposed transfer date;
  - 2. The notice includes a written agreement between the existing and new permittee's containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
  - 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- N. <u>State or Federal Laws</u>. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by *UCA 19-5-117* and *Section 510* of the *Act* or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.
- O. <u>Water Quality Reopener Provision</u>. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:
  - 1. Water Quality Standards for the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
  - 2. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.

- 3. Revisions to the current CWA § 208 areawide treatment management plans or promulgations/revisions to TMDLs (40 CFR 130.7) approved by the EPA and adopted by DWQ which calls for different effluent limitations than contained in this permit.
- P. <u>Toxicity Limitation Reopener Provision</u>. This permit may be reopened and modified (following proper administrative procedures) to include, whole effluent toxicity (WET) limitations, a compliance date, a compliance schedule, a change in the whole effluent toxicity (biomonitoring) protocol, additional or modified numerical limitations, or any other conditions related to the control of toxicants if one or more of the following events occur;
  - 1. Toxicity is detected, as per *Part Error! Reference source not found.* of this permit, during the duration of this permit.
  - 2. The TRE results indicate that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits, and the Director agrees that numerical controls are the most appropriate course of action.
  - 3. Following the implementation of numerical control(s) of toxicant(s), the Director agrees that a modified biomonitoring protocol is necessary to compensate for those toxicant(s) that are controlled numerically.
  - 4. The TRE reveals other unique conditions or characteristics, which in the opinion of the permit issuing authority justify the incorporation of unanticipated special conditions in the permit.
- Q. <u>Storm Water-Reopener Provision</u>. At any time during the duration (life) of this permit, this permit may be reopened and modified (following proper administrative procedures) as per *UAC R317.8*, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "waters-of-State".

#### VI. DEFINITIONS

- 1. The "Weekly Average", other than for e-coli bacteria, fecal coliform bacteria, and total coliform bacteria, is the arithmetic average of all samples collected during a calendar week. Geometric means shall be calculated for e-coli bacteria, fecal coliform bacteria, and total coliform bacteria. The calendar week, which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains Saturday.
- 2. The "Monthly Average", other than for e-coli bacteria, fecal coliform bacteria and total coliform bacteria, is the arithmetic average of all samples collected during a calendar month. Geometric means shall be calculated for e-coli bacteria, fecal coliform bacteria and total coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
- 3. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
- 4. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
- 5. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
- 6. "Composite Samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
  - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
  - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
  - c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,
  - d. Continuous sample volume, with sample collection rate proportional to flow rate.

- 7. "Upset," means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- 8. "Bypass," means the diversion of waste streams from any portion of a treatment facility.
- 9. "Severe Property Damage," means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 10. "Director," means Director of the Utah Division of Water Quality.
- 11. "EPA," means the United States Environmental Protection Agency.
- 12. "Chronic toxicity" occurs when the inhibitory concentration to 25% of the population ( $IC_{25}$ ) is less than or equal to 26% effluent.
- 13. " $IC_{25}$ " is the concentration of toxicant (given in % effluent) that would cause a 25% reduction in mean young per female, or a 25% reduction in overall growth for the test population.
- 14. "Act," means the Utah Water Quality Act.
- 15. "Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- 16. "Coal pile runoff" means the rainfall runoff from or through any coal storage pile.
- 17. "CWA," means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
- 18. "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a *UPDES* permit (other than the *UPDES* permit for discharges from the municipal separate storm sewer) and discharges from fire fighting activities, fire hydrant flushing, potable water sources including waterline flushing, uncontaminated ground water

(including dewatering ground water infiltration), foundation or footing drains where flows are not contaminated with process materials such as solvents, springs, riparian habitats, wetlands, irrigation water, exterior building wash down where there are no chemical or abrasive additives, pavement wash water where spills or leaks of toxic or hazardous materials have not occurred and where detergents are not used, and air conditioning condensate.

- 19. "Point source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.
- 20. "Runoff coefficient" means the fraction of total rainfall that will appear at a conveyance as runoff.
- 21. ""Section 313 water priority chemical" means a chemical or chemical categories that:
  - a. Are listed at 40 CFR 372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986);
  - b. Are present at or above threshold levels at a facility subject to *EPCRA Section* 313 reporting requirements; and
  - c. Meet at least one of the following criteria:
    - (1) Are listed in *Appendix D* of 40 CFR Part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances);
    - (2) Are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or
    - (3) Are pollutants for which EPA has published acute or chronic water quality criteria. See *Appendix III* of this permit. This appendix was revised based on final rulemaking EPA published in the *Federal Register* November 30, 1994.
- 22. "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to EPCRA Section 313;

- fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
- 23. "Significant spills" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under *Section 311 of the Clean Water Act* (see 40 CFR 110.10 and 40 CFR 117.21) or *Section 102* of CERCLA (see 40 CFR 302.4).
- 24. "Storm water" means storm water runoff, snowmelt runoff, and surface runoff and drainage.
- 25. "Waste pile" means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.
- 26. "10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable reoccurrence interval of once in 10 years. This information is available in *Weather Bureau Technical Paper No. 40*, May 1961 and *NOAA Atlas 2*, 1973 for the 11 Western States, and may be obtained from the National Climatic Center of the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce

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# FACT SHEET - STATEMENT OF BASIS PACIFICORP - CARBON PLANT UPDES PERMIT NO. UT0000094 PERMIT RENEWAL MAJOR INDUSTRIAL

#### **FACILITY CONTACT**

Terry Guthrie Senior Environmental Engineer P. O. Box 839 Helper, Utah 84526 Intersection Hwy 6 & 91 (3 miles north of Helper) (435) 472-7295

### **DESCRIPTION OF FACILITY**

This is a coal fired Steam Electric Power Generating facility consisting of two units; Unit No. 1, built in 1954, rated at 66 MW; and Unit No. 2, built in 1957, rated at 100 MW. It is located about three miles north of Helper, Utah, at the junction of Highways 6 and 191. Outfall 001 is located at latitude 39° 43' 40" and longitude 110° 51' 52" and discharges to Willow Creek, and Outfall 003 is located at latitude 39° 43' 29" and longitude 110° 51' 50" and discharges to the Price River. The standard industrial classification (SIC) code for the facility is 4911, (Electric Power Generation). This power plant will discontinue operation on April 15, 2015. It is anticipated that within two months after shut down all water discharges will cease.

The process water source is the Price River. Process water from the Price River, goes through a settling pond, then to a clarifier, then to a clear well before use in the plant. Aluminum sulfate is used as a coagulant in the clarifier. Boiler makeup water is filtered and deionized by fixed bed demineralizer. Tri-sodium phosphate is added to the boiler water for pH control. Drinking water is delivered from the City of Helper. Sanitary waste water is sent to the sanitary sewer system that ends up at the Price River Water Improvement District's treatment plant.

#### **DESCRIPTION OF DISCHARGES**

There are two discharge points from this facility, Outfalls 001 and 003. Discharge 001 did not discharge in the life of the two previous permits. However, PacifiCorp has decided to keep 001 as an option to discharge, if needed. In the past, the discharge from Outfall 001 included blow down from the two cooling towers, seal water and surface drainage from the active coal pile. These waste streams were filtered through a sand filter and discharged to Willow Creek approximately 100 yards upstream from the confluence with the Price River. An oil absorbent material was used on the surface of the sand filters to absorb and remove oil in the discharge. The discharge flow rate was measured with a weir and effluent samples were collected where the effluent came out of the sand

filter building. This wastewater can also be routed to settling ponds and discharged through Outfall 003, which is what PacifiCorp has done for the last five years. Outfall 001 has been plugged and it is probable that it will not discharge again.

The discharge from Outfall 003 includes the following sources: underflow from the water treatment clarifier, backwash water and other wastewater from the sand filters (for Outfall 001), wastewater from the vacuum pumps, neutralized regenerant from cation and anion (ion exchange bed) regeneration, blowdown from the evaporators, and boiler blowdown water. These wastewaters are routed through settling ponds, and before discharge, treated with carbon dioxide for pH control. Booms in the settling ponds and a baffle at the outlet are used to control the discharge of oil. A weir is used to measure the effluent flow rate and effluent samples are taken at the discharge from the settling ponds, before discharging to the Price River.

Chemical metal cleaning waste (see 40 Code of Federal Regulations "CFR" 423.11(c)) is contained and evaporated. Bottom ash is collected wet and fly ash is collected dry and hauled away for disposal. Problems in the past with pH have caused the plant to reduce the contact of wastewater with ash. They have done this by using dry methods to clean the loading area, but there is still some exposure because afterward it is washed down with water that goes to the wastewater system. Another possibility of wastewater exposure to ash is when a hole develops in a bag in the bag house. This is not normal operation, and is an infrequent occurrence. Very little ash is exposed to wastewater and the pH problem that the permittee has had in the past has not been a problem for a few years.

As a dust control measure and an effort to reduce the total dissolved solids (TDS) loading in Outfall 003, water from the settling ponds discharged to Outfall 003 is pumped (via a 4-inch pipeline) and dispersed over the ash disposal area for wetting. The soluble solids in the water serve to form a crust on the ash, when dried, that helps prevent wind-born dust off the ash. The 4-inch pipeline is about one mile long. During the winter the pipeline is drained to prevent freezing. The drained water, about 6000 gallons, goes to a depressed area about midway along the pipeline, that does not flow to other surface waters.

### **VIOLATIONS**

During the past five years the facility reported the following effluent limitation exceedances on their discharge monitoring reports:

Discharge Serial No.	Parameter Description	Monitoring Period End Date	Reported Value	Effluent Limitation Type	Limit Value
003A	Total Suspended Solids	06/30/2013	45.0 mg/l	Weekly Average	35.0
003A	Total Suspended Solids	07/31/2012	26.0 mg/l	Monthly Average	25.0
003A	Total Dissolved Solids	10/31/2013	1.006 ton	Daily Maximum Loading	1.0
003A	Total Suspended Solids	12/31/2013	40.0 mg/l	Monthly Average	25.0
003A	Total Suspended Solids	12/31/2013	40.0 mg/l	Weekly Average	35.0

# RECEIVING WATERS AND STREAM CLASSIFICATION

The receiving waters are Willow Creek and the Price River. The Carbon Power Plant discharges flow to the Price River below the City of Price Water Treatment Plants Intake structure. This portion of Price River and tributaries are classified 2B, 3A, and 4, according to *Utah Administrative Code* "*UAC*" *R317-2-13*:

- Class 2B -Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
- Class 3A -protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.
- Class 4 -protected for agricultural uses including irrigation of crops and stock watering.

In addition, the Colorado River and its tributaries are protected by the Colorado River Basin Salinity Control Forum, in which the State of Utah is a participant.

# SUBSTANTIVE PERMIT CHANGES

Changes made during the permit renewal include removal of the acute biomonitoring and addition of chronic biomonitoring. Also daily maximum limits of 1.0 mgd and 1,200 mg/L for total flow and TDS limits were added, respectively. Lastly, the pH limit for Outfall 003 was changed from 9.5 to 9.0 in accordance with the designated use numeric criteria.

### **BASIS FOR EFFLUENT LIMITATIONS**

#### **Technology Based Limitations**

40 CFR 423 - Steam Electric Power Generating point Source Category

Proposed new language

EPA currently has new "Proposed Effluent Guidelines for the Steam Electric Power Generating Category" published June 7, 2013 for public comment. These proposed rules do not apply to this permit renewal as they have not yet been incorporated into the CWA. Language in the proposed rule states more stringent regulations will begin within the next permit cycle beginning July 1, 2017.

40 CFR 423.13 – Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT)

The requirements found at 40 CFR 423.13(d)(1) prohibits the discharge of any of the 126 priority pollutants contained in cooling tower chemical in detectable amounts, except for chromium and zinc and includes effluent limitations for chromium and zinc. Effluent limitation for any of the 126 priority pollutants are not included as Part I.D.7 of the Carbon Plant prohibits discharge of any detectable amount of the 126 priority pollutants or submission of engineering calculations demonstrating these 126 priority pollutants are not present. The Carbon plant has historically submitted by the fact it uses Nalco 3DT189 for cooling tower maintenance that contains none of the 126 priority pollutants.

Section 316(b) of Clean Water Act - Cooling Water Intakes

The PacifiCorp Carbon Plant has a river inlet upstream of a settling pond. A diversion dam spans the river diverting water into a concrete box through a gate and grate. The water is then gravity fed at a 2% slope into a settling pond. On the effluent side of the pond, prior to settled water being gravity fed to the plant, is where the traveling screen is located.

Requirement for regulation under CWA Section 316(b) was considered as the plant withdraws water from the Price River for use in the cooling towers. On May 19, 2014 EPA signed final language to amend 40 CFR Part 125.9. Part 125.93 states that the facility must comply with the applicable BTA standards within 8 years after the effective date of the final rule. Due to this statement proposed language will be evaluated during the next permit cycle. The Carbon Plant does not meet the 50 mgd intake rate to trigger additional monitoring requirements under Part 125.9. Thus detailed analyses of aquatic organism surveys and assessments are not required for the intake system.

PacifiCorp (	Carbon Pla	nt - Cooling	Water	Intake	Rates	by Y	ear
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	Flow (	(mgd)
	2012	2013
January	2.7	2.8
February	2.7	2.5
March	2.7	2.9
April	2.6	2.8
May	2.6	2.8
June	2.9	3.1
July	3	2.9
August	2.9	2.4
September	3.1	2.3
October	2.8	2.5
November	2.5	2.5
December	2.6	2.5

### Water Quality Based Effluent Limitations

Limitations on TSS and pH are based on current Utah Secondary Treatment Standards, *Utah Administrative Code R317-1-3.2*. The total dissolved solids (TDS) limitation is based on the wasteload analysis (WLA) dated March 13, 2014. The Total Residual Chorine (TRC) and temperature limitations are also based on the WLA as well. The dissolved oxygen limitation is based on the WLA, and the Oil and Grease (O&G) limitation is based on Best Professional Judgment. The flow, monitoring and reporting requirements are based on the Utah Division of Water Quality guidelines of December 1991. Based on self-monitoring data during the last permit period, the PacifiCorp Carbon facility should not have any difficulty meeting the permit limitations indicated below.

Utah Administrative Code R317-1-3.2.4 requires waters of the Colorado River and its tributaries shall be protected by the requirements of the "Proposed Water Quality Standards for the Salinity including Numeric Criteria and Plan Implementation for Salinity Control, Colorado River System, June 1975" and revisions. The TDS limitation of 1.0 ton per day is a net limit is taken from the 2011 Review NPDES Permit Program Policy for implementation of Colorado River Salinity Standards I.B.4.a. Calculation of TDS loading for this permit is made using the difference of monthly TDS influent concentration data and monthly (same day sampled) TDS effluent concentration data. TDS loading is for the entire facility and is a sum of the loading of each discharge outfall. Since Outfall 001 does not discharge the loading comes only from Outfall 003.

Pacificorp-Ca	Pacificorp-Carbon, Discharge 001, Effluent Limitations <sup>1</sup>						
Parameter	Maximum Monthly Avg	Maximum Weekly Avg	Daily Minimum	Daily Maximum			
Flow, mgd	NA	NA	NA	1.0			
Temperature, Winter <sup>2</sup> , °C	NA	NA	NA	10.1			
Temperature, Spring <sup>2</sup> , °C	NA	NA	NA	20.0			
Temperature, Summer <sup>2</sup> , °C	NA	NA	NA	20.0			
Temperature, Fall <sup>2</sup> , °C	NA	NA	NA	11.9			
TRC, mg/L	NA	NA	NA	0.011			
pH, Standard Units	NA	NA	6.5	9.0			
D.O. mg/L	NA	NA	5.0	NA			
Oil & Grease <sup>3</sup> , mg/L	NA	NA	NA	10.0			
TSS <sup>4</sup> , mg/L	25	35	NA	50.0			
TDS, mg/L	NA	NA	NA	1200			

Pacificorp-Carbon, Discharge 001, Self-Monitoring and Reporting Requirements <sup>5</sup>						
Parameter	Frequency	Sample Type	Units			
Total Flow	Continuous	Recorder	MGD			
Temperature	Weekly	Grab	Degrees C			
TRC	Weekly	Grab	mg/L			
pН	Weekly	Grab	SU			
D.O.	Weekly	Grab	mg/L			
Oil & Grease/Visual Sheen (Sample if sheen is present)	Monthly	Grab	mg/L			
TSS	Monthly	Grab	mg/L			
TDS, Influent	Monthly	Grab	mg/L			
TDS, Effluent	Monthly	Grab	mg/L			

<sup>1</sup> See Definitions, Part VI for definition of terms.

<sup>2</sup> For compliance with this permit the seasonal limits will be defined as: Winter (January 1 – March 31), Spring (April 1-June 30), Summer (July 1 – September 30), and Fall (October 1 – December 31)

<sup>3</sup> The analytical sample for oil & grease is only required when a sheen is observed or there is another reason to believe oil & grease may be present.

<sup>4</sup> The permittee must meet the TSS maximum limit of 50 mg/L except where a rainfall event causes the overflow of facilities designed, constructed, and operated to contain the runoff from a ten year, 24-hour rainfall event. The permittee must maintain a precipitation gage at the plant that will be used for determining the amount of precipitation unless the Director approves of the use of a precipitation gage at another weather station.

<sup>5</sup> Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: at the Outfalls 001 and/or 003 prior to mixing with the receiving stream.

Pacificorp-Carbon, Discharge 003, Effluent Limitations <sup>1</sup>						
Parameter	Maximum Monthly Avg	Maximum Weekly Avg	Daily Minimum	Daily Maximum		
Flow, mgd	NA	NA	NA	1.0		
Temperature, Winter <sup>2</sup> , °C	NA	NA	NA	10.1		
Temperature, Spring <sup>2</sup> , °C	NA	NA	NA	43.2		
Temperature, Summer <sup>2</sup> , °C	NA	NA	NA	28.5		
Temperature, Fall <sup>2</sup> , °C	NA	NA	NA	11.9		
TRC, Winter <sup>2</sup> , mg/L	NA	NA	NA	0.05		
TRC, Spring <sup>2</sup> , mg/L	NA	NA	NA	0.19		
TRC, Summer <sup>2</sup> , mg/L	NA	NA	NA	0.08		
TRC, Fall <sup>2</sup> , mg/L	NA	NA	NA	0.05		
pH, S.U.	NA	NA	6.5	9.0		
D.O. mg/L	NA	NA	5.0	NA		
Oil & Grease <sup>3</sup> , mg/L	NA	NA	NA	10.0		
TSS <sup>4</sup> , mg/L	25	35	NA	50.0		
TDS, mg/L	NA	NA	NA	3200		
Whole Effluent Toxicity, Chronic	NA	NA	NA	Pass, IC <sub>25</sub> > 26% effluent		

Pacificorp-Carbon, Discharge 003, Self-Monitoring and Reporting Requirements <sup>5</sup>						
Parameter	Frequency	Sample Type	Units			
Total Flow	Continuous	Recorder	MGD			
Temperature	Weekly	Grab	Degrees C			
TRC	Weekly	Grab	mg/L			
pH	Weekly	Grab	SU			
D.O.	Weekly	Grab	mg/L			
Oil & Grease/Visual Sheen (Sample if sheen is present)	Monthly	Grab	mg/L			
TSS	Monthly	Grab	mg/L			
TDS, Influent	Monthly	Grab	mg/L			
TDS, Effluent	Monthly	Grab	mg/L			
Whole Effluent Toxicity, Chronic	Quarterly	Composite	Pass/Fail			

Pacificorp-Carbon, Sum of Discharges 001 & 003, Effluent Limitations <sup>1</sup>						
Parameter	Maximum Monthly Avg	Maximum Weekly Avg	Daily Minimum	Daily Maximum		
TDS (net contribution loading <sup>6</sup> ) tons/day	NA	NA	NA	1.0		

NA - Not Applicable

An analysis of the process water system shows there is no opportunity for organic or carbonaceous oxygen depleting materials or ammonia to be introduced into the wastewater system. The process water comes from the Price River, is clarified, caustic phosphates are added (a possible nutrient), but no other nutrients are added. If there are nutrients in the Price River water it is possible that they are removed in the clarification process. Much of the system is open (open trench conveyances, settling ponds, etc.) allowing an infusion of oxygen and a large fraction of flow goes through a countercurrent cooling tower, providing oxygen entrainment for the wastewater, and providing an opportunity for ammonia (if any) to escape. The lack of wastewater exposure to organic pollutants or ammonia, the open system, and overall opportunity for wastewater to interface with air in the system based on BPJ eliminates the need for ammonia limits. Final settling should help remove some of the forms of phosphorous that were introduced.

In accordance with the Federal requirements in the Steam Electric Power Generating Point Source Category (SEPGPSC) found in 40 CFR 423 there will be no discharge of polychorinated biphenyl compounds; there will be time limits (two hours per unit per day) on the duration of the discharge of chlorine; and a prohibition on the discharge of detectable amounts of the 126 priority pollutants in the cooling tower blowdown due to chemicals added for cooling tower maintenance. There will be no discharge of chemical metal cleaning wastes as defined in 40 CFR 423. Chemical metal cleaning wastes presently are contained and evaporated.

SEPGPSC requires that a discharge from a coal pile from rainfall must be treated and meet the TSS maximum limit of 50 mg/L except as the result of the overflow of facilities designed, constructed, and operated to contain the runoff from a ten year, 24-hour rainfall event. The permittee must maintain a precipitation gage at the plant that will be used for determining the amount of precipitation unless the Division of Water Quality Director approves of the use of a precipitation gage at another weather station.

<sup>6</sup> The TDS limitation of 1.0 ton per day is the net limit of both outfalls. Use the difference of monthly TDS influent concentration data and monthly (same day sampled) TDS effluent concentration data in calculation of TDS loading

#### **BIOMONITORING REQUIREMENTS**

As part of a nationwide effort to control toxics, biomonitoring requirements are being included in all major and significant minor permits for facilities where effluent toxicity is an existing or potential concern. Authorization for requiring effluent biomonitoring is provided for in *UAC R317-8-4.2* and *R317-8-5.3*. The Whole Effluent Toxicity (WET) Control Guidance Document, February 15, 1991, outlines guidance to be used by Utah Division of Water Quality staff and by permittees for implementation of WET control through the UPDES discharge permit program.

PacifiCorp-Carbon has been required to perform acute toxicity (LC<sub>50</sub>) testing and has not failed an acute toxicity test during the last ten years. The process for the wastewater at this facility is fairly stable and not subject to change or fluctuations. Because of the positive history of not showing any acute toxicity, the WET testing will be changed to chronic toxicity test in this permit to be done quarterly. The chronic toxicity tests will be allowed to alternate Ceriodaphnia and fathead minnows as the test species. The permit will contain the standard requirements for accelerated testing upon failure of a WET test, a preliminary toxicity investigation (PTI), and toxicity reduction evaluation (TRE) as necessary. A reopener provision is included in order to incorporate WET limits if they are determined to be necessary.

#### STORM WATER REQUIREMENTS

The storm water requirements are based on the UPDES Multi-Sector General Permit (MSGP) for Storm Water Discharges for Industrial Activity, General Permit No. UTR000000. All sections of the MSGP that pertain to discharges from power plants have been included and sections which are redundant or do not pertain have been deleted. The permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan for all areas within the confines of the facility. The Carbon plant has storm water requirements in their present permit and maintains on site a Storm Water Pollution Prevention Plan as required.

The storm water permit provisions will be continued in this renewal permit.

#### PRETREATMENT REQUIREMENTS

At present, PacifiCorp-Carbon does not discharge any process wastewater to the sanitary sewer system. Any process wastewater that the facility may discharge to the sanitary sewer at any future time, either as a direct discharge or as a hauled waste, are subject to federal, state and local pretreatment regulations. Pursuant to section 307 of the Clean Water Act, the permittee shall comply with all applicable Federal General Pretreatment Regulations promulgated, found in 40 CFR section 403, the State Pretreatment Requirements found in Utah Administrative Code R317-8-8, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the waste.

# **PERMIT DURATION**

As stated in UAC R317-8-5.1(1), UPDES permits shall be effective for a fixed term not to exceed five (5) years.

Drafted by Ken Hoffman, P.E. Environmental Scientist Utah Division of Water Quality July 1, 2014

### **PUBLIC NOTICE**

Began: November 13, 2014 Ended: December 15, 2014

Public Noticed in the Sun Advocate.

Comments from the facility were received during the public comment period. The comments have been addressed and did not result in a substantive change to the permit documents. One minor editorial change was made to both the FSSOB and UPDES Permit as a result of the comments.